

DATE: 04/07/1999
TIME: 14:45:43

This Raw Listing contains the General Information Section and up to first 5 pages.

see p. 5

ENTERED

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1 <110> APPLICANT: Shyjan, Andrew W.
2 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE DIAGNOSIS, PREVENTION
3 AND TREATMENT OF TUMOR PROGRESSION
4 <130> FILE REFERENCE: 07334/004002
5 <140> CURRENT APPLICATION NUMBER: US/08/862,442A
6 <141> CURRENT FILING DATE: 1997-05-23
7 <150> EARLIER APPLICATION NUMBER: US 08/623,679
8 <151> EARLIER FILING DATE: 1996-03-29
9 <160> NUMBER OF SEQ ID NOS: 9
10 <170> SOFTWARE: FastSEQ for Windows Version 3.0
11 <210> SEQ ID NO 1
12 <211> LENGTH: 186
13 <212> TYPE: DNA
14 <213> ORGANISM: Mus musculus
15 <400> SEQUENCE: 1
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17 gactctctac aacaacttgt ttggccctaa gagggtagag ctcagcagac acacagtgtc 120
18 ctgtgcctcc cagagtaaca tgtggttcct tgatgtgctt ccccaaaagc ccacctgtgc 180
19 agaattg 186
20 <210> SEQ ID NO 2
21 <211> LENGTH: 2729
22 <212> TYPE: DNA
23 <213> ORGANISM: Mus musculus
24 <220> FEATURE:
25 <221> NAME/KEY: CDS
26 <222> LOCATION: (321)...(1946)
27 <400> SEQUENCE: 2
28 aaggaggcta ggctgcaccc ttcccgcttg ctcagcagct gaggcagggt cagaaagcat 60
29 ggatagagaa gacattttgc aaaagggaat gcatctttgt aattcccagt acaaaagacc 120
30 ctaacagatg ttgctgtggt cagctcacta accagcacat ccccccttg ccgagtgggg 180
31 ctcccagcac aacaggagag gacaccaagc aggcagacac gcagtccggg aaatgggtctg 240
32 tcagcaaaaca caccagagc tacccaacag actcctatgg gattcttgaa ttccagggtg 300
33 ggggttactc caataaagcc atg tac atc cga gtc tcc tac gac acc aag cca 353
34 Met Tyr Ile Arg Val Ser Tyr Asp Thr Lys Pro
35 1 5 10
36 gat tcc ctg ctc cac ctc atg gtg aag gac tgg cag ctg gag ctc ccg 401
37 Asp Ser Leu Leu His Leu Met Val Lys Asp Trp Gln Leu Glu Leu Pro
38 15 20 25
39 aag ctc ttg ata tct gtg cac gga ggc ctc caa agc ttc gag atg cag 449
40 Lys Leu Leu Ile Ser Val His Gly Gly Leu Gln Ser Phe Glu Met Gln
41 30 35 40
42 tcc aaa ctg aag cag gtg ttt ggg aaa ggt ctg atc aag gct gcc atg 497
43 Ser Lys Leu Lys Gln Val Phe Gly Lys Gly Leu Ile Lys Ala Ala Met
44 45 50 55

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RAW SEQUENCE LISTING
PATENT APPLICATION US/08/862,442A

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Input Set: H862442A.RAW

45	acc acg ggg gcg tgg atc ttc acc ggg ggt gtg agc act ggt gtc gtc	545
46	Thr Thr Gly Ala Trp Ile Phe Thr Gly Gly Val Ser Thr Gly Val Val	
47	60 65 70 75	
48	agc cat gtg ggg gat gcc ttg aaa gac cac tcc tcc aag tcc aga ggc	593
49	Ser His Val Gly Asp Ala Leu Lys Asp His Ser Ser Lys Ser Arg Gly	
50	80 85 90	
51	cgg ctc tgt gct ata gga att gct ccc tgg ggc atg gtg gag aac aag	641
52	Arg Leu Cys Ala Ile Gly Ile Ala Pro Trp Gly Met Val Glu Asn Lys	
53	95 100 105	
54	gaa gac ctg att gga aaa gat gta aca aga gtc tat cag acc atg tcc	689
55	Glu Asp Leu Ile Gly Lys Asp Val Thr Arg Val Tyr Gln Thr Met Ser	
56	110 115 120	
57	aac cct ctg agc aag ctc tct gtg ctc aac aat tcc cac act cac ttc	737
58	Asn Pro Leu Ser Lys Leu Ser Val Leu Asn Asn Ser His Thr His Phe	
59	125 130 135	
60	atc ttg gct gac aac ggc acc ctg ggc aag tat ggt gct gag gtg aag	785
61	Ile Leu Ala Asp Asn Gly Thr Leu Gly Lys Tyr Gly Ala Glu Val Lys	
62	140 145 150 155	
63	ctt cga aga cag ctg gaa aaa cac atc tcc ctg cag aag atc aac aca	833
64	Leu Arg Arg Gln Leu Glu Lys His Ile Ser Leu Gln Lys Ile Asn Thr	
65	160 165 170	
66	agg ctg ggc cag ggt gta cct gtc gtg ggc cta gtg gta gaa ggt ggt	881
67	Arg Leu Gly Gln Gly Val Pro Val Val Gly Leu Val Val Glu Gly Gly	
68	175 180 185	
69	cct aac gtg gtt tct atc gtc ctg gag tat ctc aaa gaa gac cct cct	929
70	Pro Asn Val Val Ser Ile Val Leu Glu Tyr Leu Lys Glu Asp Pro Pro	
71	190 195 200	
72	gtc cct gtg gtg gtt tgc gat ggc agt gga cgt gcc tct gac att ttg	977
73	Val Pro Val Val Val Cys Asp Gly Ser Gly Arg Ala Ser Asp Ile Leu	
74	205 210 215	
75	tcc ttc gca cac aaa tac tgc gac gaa gga gga gtc ata aac gag tcc	1025
76	Ser Phe Ala His Lys Tyr Cys Asp Glu Gly Gly Val Ile Asn Glu Ser	
77	220 225 230 235	
78	ctg cgg gac cag ctt cta gtt acc att cag aaa aca ttt aat tac agc	1073
79	Leu Arg Asp Gln Leu Leu Val Thr Ile Gln Lys Thr Phe Asn Tyr Ser	
80	240 245 250	
81	aag tcc cag tcg tat cag ctg ttt gca att atc atg gag tgc atg aag	1121
82	Lys Ser Gln Ser Tyr Gln Leu Phe Ala Ile Ile Met Glu Cys Met Lys	
83	255 260 265	
84	aag aaa gaa ctc gtc act gtg ttt cgg atg ggt tcc gag ggt cag caa	1169
85	Lys Lys Glu Leu Val Thr Val Phe Arg Met Gly Ser Glu Gly Gln Gln	
86	270 275 280	
87	gat gtc gag atg gca att tta act gcc ttg ctc aaa gga acc aac gca	1217
88	Asp Val Glu Met Ala Ile Leu Thr Ala Leu Leu Lys Gly Thr Asn Ala	
89	285 290 295	
90	tca gct cca gat cag ctg agc ttg gcc ctg gct tgg aac cgg gtc gac	1265
91	Ser Ala Pro Asp Gln Leu Ser Leu Ala Leu Trp Asn Arg Val Asp	
92	300 305 310 315	
93	ata gcg cga agc cag atc ttc gtc ttt ggc cca cac tgg ccg cca ctg	1313
94	Ile Ala Arg Ser Gln Ile Phe Val Phe Gly Pro His Trp Pro Pro Leu	

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RAW SEQUENCE LISTING
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Input Set: H862442A.RAW

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96	gga agc ctg gcc cct cct gtg gac acc aaa gcc gca gag aag gaa aag					
97	Gly Ser Leu Ala Pro Pro Val Asp Thr Lys Ala Ala Glu Lys Glu Lys					
98		335	340	345		
99	aag cca ccc aca gcc acc acc aag ggg aga gga aaa gga aaa ggc aag					1409
100	Lys Pro Pro Thr Ala Thr Thr Lys Gly Arg Gly Lys Gly Lys Gly Lys					
101		350	355	360		
102	aag aaa ggc aaa gtg aaa gag gaa gtg gag gaa gag acg gac ccc cgg					1457
103	Lys Lys Gly Lys Val Lys Glu Glu Val Glu Glu Glu Thr Asp Pro Arg					
104		365	370	375		
105	aag ctt gag ctg ctc aac tgg gtg aat gcc ctg gag caa gcc atg ctg					1505
106	Lys Leu Glu Leu Leu Asn Trp Val Asn Ala Leu Glu Gln Ala Met Leu					
107		380	385	390	395	
108	gat gct ctt gtc cta gat cgg gtg gac ttt gta aag ctc ctg att gaa					1553
109	Asp Ala Leu Val Leu Asp Arg Val Asp Phe Val Lys Leu Leu Ile Glu					
110		400	405	410		
111	aac gga gtg aac atg cag cat ttc ctc acc atc ccg agg ctg gag gag					1601
112	Asn Gly Val Asn Met Gln His Phe Leu Thr Ile Pro Arg Leu Glu Glu					
113		415	420	425		
114	cta tac aac acc aga ctg ggc cca cca aac acc ctt cat ctg ctg gtg					1649
115	Leu Tyr Asn Thr Arg Leu Gly Pro Pro Asn Thr Leu His Leu Leu Val					
116		430	435	440		
117	cgg gat gta aag aag agc aac ctt cca cct gat tac cac atc agc ctc					1697
118	Arg Asp Val Lys Lys Ser Asn Leu Pro Pro Asp Tyr His Ile Ser Leu					
119		445	450	455		
120	att gat ata gga ctg gtg ctg gag tac ctc atg ggc ggt gcc tac cgc					1745
121	Ile Asp Ile Gly Leu Val Leu Glu Tyr Leu Met Gly Gly Ala Tyr Arg					
122		460	465	470	475	
123	tgc aac tac act cgg aaa agc ttc cgg act ctc tac aac aac ttg ttt					1793
124	Cys Asn Tyr Thr Arg Lys Ser Phe Arg Thr Leu Tyr Asn Asn Leu Phe					
125		480	485	490		
126	ggc cct aag agg gta gag ctc agc aga cac aca gtg tcc tgt gcc tcc					1841
127	Gly Pro Lys Arg Val Glu Leu Ser Arg His Thr Val Ser Cys Ala Ser					
128		495	500	505		
129	cag agt aac atg tgg ttc ctt gat gtg ctt ccc caa aag ccc acc tgt					1889
130	Gln Ser Asn Met Trp Phe Leu Asp Val Leu Pro Gln Lys Pro Thr Cys					
131		510	515	520		
132	gca gaa tgc aac tct tca cct cac ctg tcc caa act gac atc acc cca					1937
133	Ala Glu Cys Asn Ser Ser Pro His Leu Ser Gln Thr Asp Ile Thr Pro					
134		525	530	535		
135	cct ctg ccc tgacacccag tgcagggcct cctagctttc acatgcagcc					1986
136	Pro Leu Pro					
137	540					
138	attcacatcg cctctcaaga ctgggccagg cagtgcaccc tgtcaagcat gtctgtcctc					2046
139	ccctccttcc tacaatagcc cccctctgg gcccatgcc tctgtctctc cagcccgctc					2106
140	tcttccccac tgatcactgg cgctcctggt gtcttccaag gcaaggaaca aggaaaagca					2166
141	tctttttgcc cacaaaagtt tagggctccc cgctgttcaa ccatagccaa cctcactgta					2226
142	catcggagtc atccaggcca gctgccacac acaagccttc cccaccctat cccaatagac					2286
143	cctattcctc catcaaaatc aaagctaact cctggcctgc cacattgctt cttcttgctc					2346
144	cagcctgtta aacctccaat aaatgtcaga tctgtgggaa gccttctca ctctcactcc					2406

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RAW SEQUENCE LISTING
PATENT APPLICATION US/08/862,442A

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Input Set: H862442A.RAW

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145      acagtttgta cagagagcga gagcctcggt tggttctact tacaaggaag gctttgtgtc 2466
146      tgtctgtcct tcccaactga cttctgttga cagaagcagt ttccacatga aagcgttgac 2526
147      tcacctggat gttgtcatta attaatagtg atacaaaata ttgacacttc ttttctgtct 2586
148      tctttgttat gcagccgaaa gcacttaagc ttctgggaat ggaagtaagt aggacatgtt 2646
149      tgtggcagtt tatttactat atataccttt gtcattctgt ggaagcaaaa attgcaatgt 2706
150      tttccatgaa taaagctcgt gcc 2729
151 <210> SEQ ID NO 3
152 <211> LENGTH: 542
153 <212> TYPE: PRT
154 <213> ORGANISM: Mus musculus
155 <400> SEQUENCE: 3
156      Met Tyr Ile Arg Val Ser Tyr Asp Thr Lys Pro Asp Ser Leu Leu His
157      1 5 10 15
158      Leu Met Val Lys Asp Trp Gln Leu Glu Leu Pro Lys Leu Leu Ile Ser
159      20 25 30
160      Val His Gly Gly Leu Gln Ser Phe Glu Met Gln Ser Lys Leu Lys Gln
161      35 40 45
162      Val Phe Gly Lys Gly Leu Ile Lys Ala Ala Met Thr Thr Gly Ala Trp
163      50 55 60
164      Ile Phe Thr Gly Gly Val Ser Thr Gly Val Val Ser His Val Gly Asp
165      65 70 75 80
166      Ala Leu Lys Asp His Ser Ser Lys Ser Arg Gly Arg Leu Cys Ala Ile
167      85 90 95
168      Gly Ile Ala Pro Trp Gly Met Val Glu Asn Lys Glu Asp Leu Ile Gly
169      100 105 110
170      Lys Asp Val Thr Arg Val Tyr Gln Thr Met Ser Asn Pro Leu Ser Lys
171      115 120 125
172      Leu Ser Val Leu Asn Asn Ser His Thr His Phe Ile Leu Ala Asp Asn
173      130 135 140
174      Gly Thr Leu Gly Lys Tyr Gly Ala Glu Val Lys Leu Arg Arg Gln Leu
175      145 150 155 160
176      Glu Lys His Ile Ser Leu Gln Lys Ile Asn Thr Arg Leu Gly Gln Gly
177      165 170 175
178      Val Pro Val Val Gly Leu Val Val Glu Gly Gly Pro Asn Val Val Ser
179      180 185 190
180      Ile Val Leu Glu Tyr Leu Lys Glu Asp Pro Pro Val Pro Val Val Val
181      195 200 205
182      Cys Asp Gly Ser Gly Arg Ala Ser Asp Ile Leu Ser Phe Ala His Lys
183      210 215 220
184      Tyr Cys Asp Glu Gly Gly Val Ile Asn Glu Ser Leu Arg Asp Gln Leu
185      225 230 235 240
186      Leu Val Thr Ile Gln Lys Thr Phe Asn Tyr Ser Lys Ser Gln Ser Tyr
187      245 250 255
188      Gln Leu Phe Ala Ile Ile Met Glu Cys Met Lys Lys Lys Glu Leu Val
189      260 265 270
190      Thr Val Phe Arg Met Gly Ser Glu Gly Gln Gln Asp Val Glu Met Ala
191      275 280 285
192      Ile Leu Thr Ala Leu Leu Lys Gly Thr Asn Ala Ser Ala Pro Asp Gln
193      290 295 300
194      Leu Ser Leu Ala Leu Ala Trp Asn Arg Val Asp Ile Ala Arg Ser Gln

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RAW SEQUENCE LISTING PATENT APPLICATION US/08/862,442A

DATE: 04/07/1999
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Input Set: H862442A.RAW

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195      305      310      315      320
196      Ile Phe Val Phe Gly Pro His Trp Pro Pro Leu Gly Ser Leu Ala Pro
197      325      330      335
198      Pro Val Asp Thr Lys Ala Ala Glu Lys Glu Lys Lys Pro Pro Thr Ala
199      340      345      350
200      Thr Thr Lys Gly Arg Gly Lys Gly Lys Gly Lys Lys Lys Gly Lys Val
201      355      360      365
202      Lys Glu Glu Val Glu Glu Glu Thr Asp Pro Arg Lys Leu Glu Leu Leu
203      370      375      380
204      Asn Trp Val Asn Ala Leu Glu Gln Ala Met Leu Asp Ala Leu Val Leu
205      385      390      395      400
206      Asp Arg Val Asp Phe Val Lys Leu Leu Ile Glu Asn Gly Val Asn Met
207      405      410      415
208      Gln His Phe Leu Thr Ile Pro Arg Leu Glu Glu Leu Tyr Asn Thr Arg
209      420      425      430
210      Leu Gly Pro Pro Asn Thr Leu His Leu Leu Val Arg Asp Val Lys Lys
211      435      440      445
212      Ser Asn Leu Pro Pro Asp Tyr His Ile Ser Leu Ile Asp Ile Gly Leu
213      450      455      460
214      Val Leu Glu Tyr Leu Met Gly Gly Ala Tyr Arg Cys Asn Tyr Thr Arg
215      465      470      475      480
216      Lys Ser Phe Arg Thr Leu Tyr Asn Asn Leu Phe Gly Pro Lys Arg Val
217      485      490      495
218      Glu Leu Ser Arg His Thr Val Ser Cys Ala Ser Gln Ser Asn Met Trp
219      500      505      510
220      Phe Leu Asp Val Leu Pro Gln Lys Pro Thr Cys Ala Glu Cys Asn Ser
221      515      520      525
222      Ser Pro His Leu Ser Gln Thr Asp Ile Thr Pro Pro Leu Pro
223      530      535      540
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225      <211> LENGTH: 20
226      <212> TYPE: DNA
227      <213> ORGANISM: Artificial Sequence
228      <220> FEATURE:
229      <223> OTHER INFORMATION: primer
230      <400> SEQUENCE: 4
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233      <211> LENGTH: 23
234      <212> TYPE: DNA
235      <213> ORGANISM: Artificial Sequence
236      <220> FEATURE:
237      <223> OTHER INFORMATION: primer
238      <400> SEQUENCE: 5
239      gcaactacta cactcggaaa agc
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241      <211> LENGTH: 4944
242      <212> TYPE: DNA
243      <213> ORGANISM: Homo sapiens
244      <220> FEATURE:

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20

23

Please Note:

Use (n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> <223> fields of each sequence which presents at least one n or Xaa.

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VERIFICATION SUMMARY
PATENT APPLICATION US/08/862,442A

DATE: 04/07/1999
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Input Set: H862442A.RAW

Line	Error/Warning	Original Text
248	W "N" or "Xaa" used: Feature required	actcattata gggntcgagc ggccgcccgg gcaggttt
741	W "N" or "Xaa" used: Feature required	actcattata gggntcgagc ggccgcccgg gcaggttt